AT-RPS9000 & AT-PWR
Quick Install Guide

Allied Telesyn

AT-RPS9000 Quick Install Guide
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19800 North Creek Parkway, Suite 200, Bothell, WA 98011, USA.

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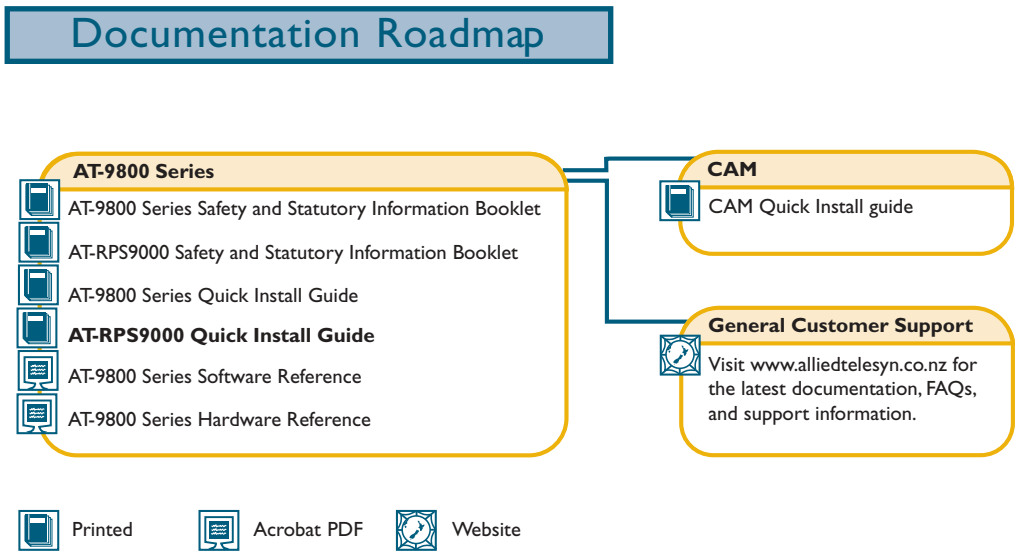


Package Contents

The following items are included with each AT-RPS9000. Contact your sales representative if any items are damaged or missing.

- One AT-RPS9000 chassis.
- One AT-PWR9000 power unit (pre-installed at factory).
- Two AC power cords.
- One DC cable for connecting the RPS to an AT-9812T or AT-9816GB switch.
- One 19 inch rack-mount kit.
- Two power cord retaining clips.
- One AT-RPS9000 Quick Install Guide.
- One Safety and Statutory Information booklet.
- One warranty card.

For AT-PWR9000 power units purchased separately, the following items are included with each unit.

- One AT-PWR9000 power unit.
- One DC cable for connecting the RPS to an AT-9812T or AT-9816GB switch.
- One AT-RPS9000 Quick Install Guide.
- One Safety and Statutory Information booklet.
- One warranty card.

Selecting a Site

The AT-RPS9000 chassis can be installed in a standard 19-inch rack or on a level surface such as a desktop or bench. When installing the RPS, choose a site that:

- Allows adequate airflow around the RPS's vents. If RPS units are stacked on top of each other, their rubber feet must be fitted.
- Is free of dust and moisture.
- Will maintain an ambient temperature range of 0 to 40° C (32 to 104° F) and a humidity range of 5 to 95% non-condensing.
- Has a reliable and earthed (grounded) power supply circuit, preferably dedicated and filtered.
- Allows easy access to the unit's cable connections.
- Will allow the RPS to be connected to a power supply and its switches, using the supplied cables. The cables will be damaged if bent excessively.

RPS/Switch Compatibility

To provide redundant power to AT-9812T and AT-9816GB switches, use an AT-RPS9000 chassis. The chassis must be fitted with one AT-PWR9000 power unit for each switch that is to receive redundant power. The AT-RPS9000 can take up to four AT-PWR9000 power units, and so can supply up to four switches.

To provide redundant power to AT-9816GF and AT-9812TF switches, use an AT-RPS8000 redundant power supply system. See the *AT-9800 Series Hardware Reference* for more information on AT-RPS8000 and AT-RPS9000 redundant power systems.

AT-RPS9000 and AT-RPS8000 redundant power systems are not cross compatible. AT-PWR9000 power units can only be used in the AT-RPS9000 chassis. AT-PWR8000 power units can only be used in the AT-RPS8000 chassis.

Installing the RPS

This equipment must be earthed.

Do not attempt to install an RPS without observing correct antistatic procedures. Failure to do so may damage the RPS or AT-9800 Series switch. If you are unsure what the correct procedures are, contact your authorised Allied Telesyn distributor or reseller.

Ensure that there is no AC power applied to the RPS before the DC cable is disconnected, or connected.

Follow these steps to install the RPS:

1. **Read the safety information.**

   For safety information, see the *AT-RPS9000 Safety and Statutory Information* booklet. A copy of this booklet is supplied with the RPS, and can also be found at www.alliedtelesyn.co.nz/support/at9800/.

2. **Gather the tools and equipment you will need.**

   You will need a Phillips screwdriver when removing blank faceplates and securing AT-PWR9000 power units.

   To install the RPS in a rack you will need a screwdriver, screws to attach the rack-mount brackets to the rack, and cage nuts.

   You will also need the cables that were packed with the RPS.

3. **Unpack the AT-RPS9000.**

   In an antistatic environment, remove the AT-RPS9000 from its packing material. Be sure to observe ESD precautions.

   Verify the package contents. If any items are damaged or missing, contact your sales representative.

4. **Fit the power cord retaining clips.**

   There are two retaining clips, one for each of the AC power inlets on the chassis's rear panel.

5. **Place the AT-RPS9000 in its operating location.**

   If installing the RPS on a desktop:

   - Make sure the RPS's rubber feet are attached.

   If installing the RPS in a rack:

   - Remove the rubber feet.
   - Attach the rack-mounting brackets.
   - Mount the RPS in the rack.

   For more information on selecting a site, see "Selecting a Site" on page 4.

6. **Install the AT-PWR9000 power unit (if not already installed).**

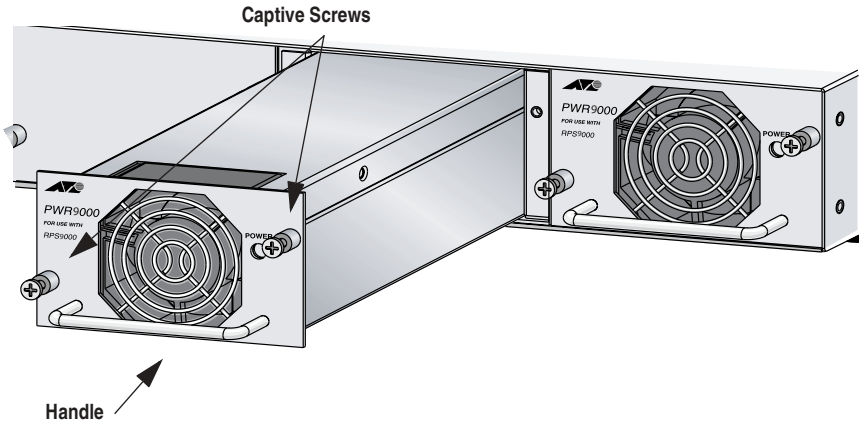
   - In an antistatic environment, remove the AT-PWR9000 from its packing material. Be sure to observe ESD precautions.
   - On the AT-RPS9000 chassis, choose an empty bay and remove its blank faceplate by loosening the two Phillips screws until they disengage from the chassis (see Figure 1 on page -6).

Keep the faceplate for future use. If you remove a power unit, replace the faceplate to prevent dust and debris from entering the AT-RPS9000 chassis and to maintain proper airflow.

The AT-RPS9000 and other AT-PWR9000 units may overheat or be damaged by dust and debris if bays are left uncovered.

- Slowly and carefully slide the power unit into the chassis.
- Firmly press the power unit home (until its front panel engages or nearly engages the chassis).
- Tighten the two Phillips screws on the power unit's faceplate.

Figure 1: Captive mounting screws on the AT-PWR9000.

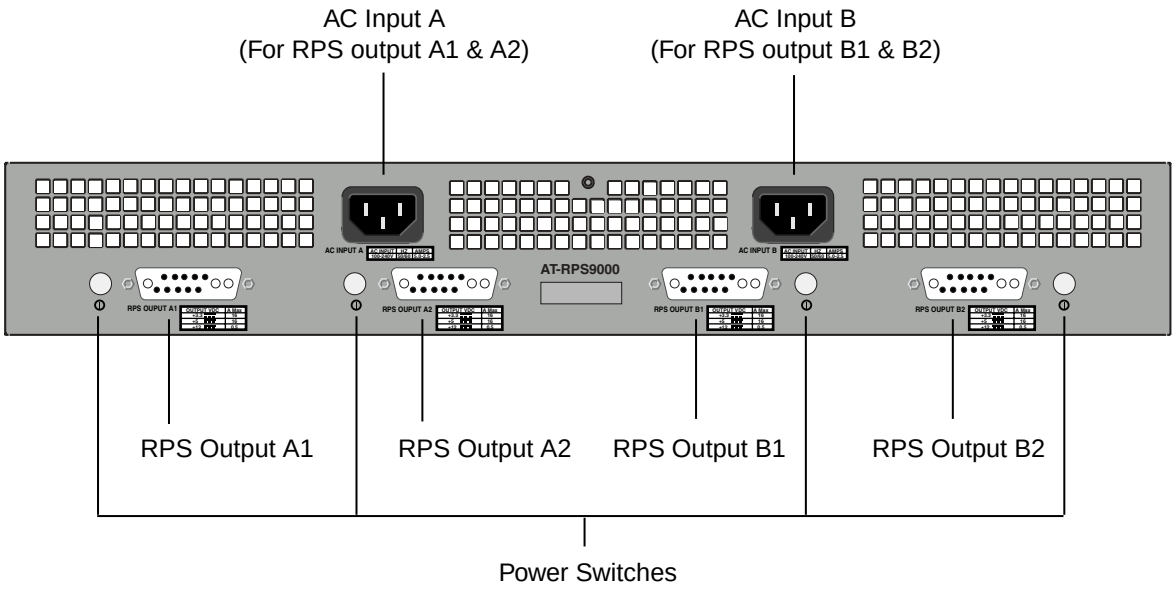


7. Connect the DC cable(s)

On the AT-RPS9000's rear panel, attach one end of the provided DC cable to an output connector. Use a connector that is directly behind a bay that has an installed AT-PWR9000 power unit. Figure 2 on page -7 shows the DC output connectors.

Attach the other end of the DC cable to the RPS input connector on an AT-9812T or AT-9816GB switch. The RPS input connector is on the switch's rear panel.

Figure 2: AT-RPS9000 rear panel.



8. **Apply power to the AT-PWR9000.**

   There are two AC inputs on the chassis's rear panel (see Figure 2 on page -7). Input A feeds the two bays that supply RPS outputs A1 and A2, while input B feeds the bays that supply outputs B1 and B2.

   Use the provided AC power cord(s) to connect the appropriate bays (bays that have installed AT-PWR9000 units) to a mains power supply.

9. **Activate the RPS output(s).**

   There are four standby switches on the chassis's rear panel, one for each RPS output (see Figure 2 on page -7). Press the standby switch that is closest to the RPS output you want to activate.

10. **Check the RPS and switch LEDs.**

    RPS and AT-9812T or AT-9816GB switch LEDs indicate the system's operational status. See the following section for details.

LEDs and Troubleshooting

AT-PWR9000 units have one LED.

Table 1: AT-PWR9000 LED.

LED	State	Function
Power	Green	The PWR is receiving AC power and the voltage is within an acceptable range

AT-9800 Series switches have the following power supply related LEDs.

Table 2: Power supply related LEDs found on all AT-9800 Series Switches.

LED	State	Function
PWR (Power)	Green	The switch is receiving power

Table 2: Power supply related LEDs found on all AT-9800 Series Switches.

LED	State	Function
Fault	Red	The switch or management software is malfunctioning
	1 Flash	A switch fan has failed or is operating below the recommended speed
	2 Flashes	If RPS monitoring is enabled, an RPS fan has failed or is operating below the recommended speed
	3 Flashes	If an RPS is connected, the switch's PSU (Power Supply Unit) has failed
	4 Flashes	If RPS monitoring is enabled, the RPS PSU has failed
	5 Flashes	If RPS monitoring is enabled, an RPS is not connected or is not operational
RPS[1] (Redundant Power Supply)	Green	An RPS is connected to the switch and is receiving power

1. DC models of AT-9800 Series switches do not have an RPS connector and the RPS LED will not function.

If the RPS does not function as expected, follow these steps:

1. Check all cable connections are correct and secure.
2. Check that AT-PWR9000 units are installed in the correct bays (bays that have AC input and DC output cables connected).
3. Check the standby switches for the appropriate bays have been pressed, and are in the ON position.
4. Check the RPS is receiving the correct AC voltage.
5. If the LEDs indicate a switch fault, replace the switch or have it serviced by authorised service personnel.

If the LEDs still indicate a fault, but no fault exists on the switch or power supply circuits, or if the LEDs indicate an RPS fault, contact your authorised Allied Telesyn distributor or reseller.

Where to Find More Information

Sources of further information:

- The *AT-RPS9000 Series Statutory and Safety Information* booklet, which includes important safety information and statutory declarations for the AT-RPS9000 chassis and AT-PWR9000 power unit.
- The *AT-9800 Series Statutory and Safety Information* booklet, which includes important safety information and statutory declarations for AT-9800 Series switches.

- The *AT-9800 Series Quick Install Guide*, which outlines the procedure for installing AT-9800 Series switches.
- The *AT-9800 Series Hardware Reference*, which includes detailed hardware specifications and pinout information for the RPS.
- The *AT-9800 Series Software Reference*, which provides detailed information on configuring the switch and its software.

These documents can be downloaded from www.alliedtelesyn.co.nz/support/at9800/.